

DEPARTMENT OF TRANSPORTATION

DISTRICT

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April 25, 1994

03-Pla-65
PM R12.2/R23.8
03-333800
Lincoln BypassMr.
P.O.
Dept. [see address list]
City

Dear Mr. X:

The attached information relative to the proposed Lincoln Bypass project is being sent to you in preparation for the NEPA/404 Integration meeting to be held on May 5, 1994. Your attendance at this meeting is critical to its success; please be prepared to discuss all issues specified under terms of the Integration Memorandum of Understanding.

Should you have any questions, please contact Lucie Adams at (916) 263-3415.

Sincerely,

Original signed by

JEAN L. BAKER, Chief
Environmental Branch B

Enclosure

cc: Joe Caputo, Chief - Project Studies
Wendy Tkacheff, Project Engineer - Project Studies
Jeffrey Loudon, Chief - Environmental A
Lucie Adams, Biologist - Environmental Division

HOB:dr

(Env)

Filename: lbypass

Address list:

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Permitting Section
75 Hawthorn Street (W-7-2)
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Mr. Mike Aceituno
Attention: Darren Fong
U.S. Fish and Wildlife Service
2800 Cottage Way
Sacramento, CA 95825

Mr. George Wishman
Area Engineer
Federal Highway Administration
U.S. Bank Plaza
980 Ninth Street, Suite 400
Sacramento, CA 95814-2724

PURPOSE AND NEED STATEMENT

The purpose of this project is to reduce traffic delay, congestion and improve safety by constructing a bypass to carry regional traffic around the City of Lincoln. The project will require a modification of the route adopted by the California Transportation Commission in 1964. Problems identified which will be addressed by the proposed project include:

- o The existing adopted Route 65 alignment for the bypass has not been protected by the local agencies, nor was right of way acquired by the State. Development on the alignment makes it infeasible to build the adopted Route 65.
- o The existing facility through Lincoln is a "Main Street" highway which will not serve the ultimate regional transportation needs. Conflicts between local and regional traffic has resulted in an increase in congestion.
- o The existing highway does not have the capacity to accommodate the increase in vehicles expected to use the roadway in the future. The Level of Service (LOS) for the existing highway is LOS D, and is projected to deteriorate to LOS F by the year 2005.
- o The accident rate for existing Highway 65 within the project limits is higher than the expected rate for this type of facility.

Project Status

The City of Lincoln requested by resolution (No. 87-23 March 24, 1987), that the California Transportation Commission (CTC) consider a modification of a portion of the current Route 65, adopted in May, 1964. The CTC included the proposed project in the 1988 State Transportation Improvement Program (STIP) Special Studies list of projects. \$250,000 has been programmed for right of way preservation in the 1992 STIP for the 95/96 Fiscal Year.

The current project schedule calls for public circulation of the Draft Environmental Impact Statement by July 1995; CTC approval of the route modification in August 1996; completion of the Final Environmental Impact Statement in October 1996; project approval by February 1997, and approval of Plans, Specifications and Estimates in February 2000. Construction of the project's initial stage would occur upon approval of funding and acquisition of right of way.

System Linkage

Route 65 serves as a major north-south highway along the ^{east} ~~west~~ side of the Sacramento Valley. It was included as part of the State Highway System under authorization of the State Highway Act of 1909, and made part of the California Freeway and Expressway system in 1959. Highway 65 connects the highly urbanized areas of Sacramento and Roseville with cities of Lincoln, Wheatland, Marysville and Yuba City.

The proposed project is discussed in the Route 65 Concept Report prepared by Caltrans in 1986. This report called for the upgrading of Route 65 to expressway status from Interstate 80 (I-80) to the City of Lincoln with bypasses of the Cities of Roseville and Lincoln. The first segment of Route 65, also known as the Roseville Bypass, has been upgraded to a four-lane expressway between I-80 and Blue Oaks Boulevard.

Capacity

Regional trips with origin and destination of Lincoln are expected to increase significantly as the City's economy grows. Design year (2020) traffic north of Lincoln is projected to increase from the current 10,000 vehicles per day to approximately 22,000 vehicle per day. South of Lincoln, traffic volumes are expected to increase from the current 15,000 vehicles per day to approximately 70,000 vehicles per day.

The Level of Service on existing Route 65 within the project limits is projected to deteriorate from the current Level of Service D to Level of Service F by the year 2005.

The existing roadway's traffic carrying capacity is limited by the presence of numerous driveways and intersections. The current traffic congestion is expected to increase as the area develops. The "Main Street" nature of the existing facility is not conducive for expansion to account for the anticipated increase traffic volumes.

Transportation Demand

The District 3 System Management Plan (SMP) dated August 1992, indicates that the concept facility for Route 65 is a four-lane expressway with a bypass of Lincoln. Traffic volumes anticipated in the SMP are consistent with traffic projections for the proposed facility.

Social/Economic Demands

The General Plans for Placer County and the City of Lincoln indicate that the economy will experience continued growth and a need to increase capacity on Route 65. The transportation and circulation elements of these plans call for the planning and construction of a Route 65 bypass west of the City of Lincoln. Traffic studies were prepared based on the proposed developments discussed in the General Plans.

Modal Interrelationships

The Lincoln Airport is located northwest of the City of Lincoln. Improved access would be made possible by realignment of Route 65 to the west and direct connections to either Nicolaus Road and/or Nelson Road.

Transit service is provided in the area by Lincoln Transit and Placer County Transit. The City of Lincoln currently operates a transit service on weekdays throughout central Lincoln. No expansion plans are being considered at this time. Placer County Transit provides bus service to Rocklin and Loomis. Service to Roseville is also provided to allow for connections to the Roseville Commuter shuttle and Sacramento Regional Transit. Greyhound Bus Line provides scheduled stops between Lincoln and Sacramento twice daily.

No passenger rail service is currently available from Lincoln; the Placer County Transportation Commission plans to conduct a rail feasibility study for the extension of Light Rail from Roseville to Lincoln. The Study is expected to begin in the Spring of 1994.

Park and Ride facilities are being planned as part of the proposed project. These facilities can serve as an interface between the existing transit services and promote ride sharing.

Safety

The accident rates on existing Highway 65 were determined based on the Traffic Accident Survey Analysis System (TASAS) listing accidents for the given post miles within the proposed project's limits. Based upon this information, the accident rate for the entire length of the proposed project is slightly higher than expected for a conventional two-lane highway.

One segment of existing Highway 65 within the project limits is significantly higher than expected. The actual accident rate at the downtown Lincoln intersections (First Street through 7th Street) is approximately 5.9 times the expected rate.

The accident rate in Sheridan was approximately four times the expected rate during the three year period from 1985 - 1988. Current data for the three period from 1991 to 1994 indicates that the total accident rate has dropped to approximately 1.1 times the expected rate. This is largely due to a safety project at Sheridan completed in May of 1988, which flattened the curves at the existing at-grade railroad crossing and added left-turn channelization.

The proposed project will relieve congestion and thus, reduce accident potential in downtown Lincoln by providing an initial four-lane to two-lane expressway to carry regional traffic around the city to the west. Current expected accident rates for total accidents are 1.8 per million vehicle miles. A four-lane expressway would have an expected total accident rate of 1.07 per million vehicle miles. The longer alternatives would continue the bypass to north of Sheridan superseding the existing at-grade railroad crossing also reducing accident potential at this location.

Roadway Deficiencies

Existing Route 65 in downtown Lincoln is operating at Level of Service (LOS) D during peak hours. With projected growth, the LOS will deteriorate to F by the year 2005. Route 65 between Lincoln and Sheridan is currently operating at LOS C/D during peak hours. The LOS is expected to drop to LOS E by the year 2005 and LOS F 2010 with project growth. To maintain a LOS of D on existing Route 65, widening to four-lanes would be required through Lincoln by the year 2000. To maintain a LOS of D on existing Route 65 between Lincoln and Sheridan widening to four-lanes would be required by the year 2005. Upgrading existing Route 65 to four-lane freeway through these areas is not practical due to the presence of numerous road and driveway connections and the limited available width through downtown Lincoln.

The shorter bypass alternatives would address roadway deficiencies through downtown Lincoln by providing a four-lane freeway bypass from just south of Industrial Boulevard to just south of Wise Road. However, the shorter alternatives would not address the roadway deficiencies between Lincoln and Sheridan where the LOS is expected to deteriorate to the point where a four-lane facility is needed in this area by the year 2005.

The longer bypass alternatives would address the roadway deficiencies through downtown Lincoln and between Lincoln and Sheridan. These alternatives would provide a four-lane to two-lane expressway upgradable to four-lane freeway bypass from just south of Industrial Boulevard to Bear River Bridge.

PROPOSED ACTION AND PROJECT ALTERNATIVES

A. Proposed Action

The project proposal calls for the construction of a State Route 65 bypass of the downtown area of the City of Lincoln on new right of way in Placer County, California (See Exhibit 1). The ultimate facility being planned is a four-lane freeway with interchanges at selected locations. Initial construction would involve an access controlled expressway having segments of two or four lane roadways based upon projected traffic demands. The ultimate freeway and four lane expressway would have a 21.3 m (70 ft) median and a minimum right of way width of 70.1 m (230 ft). Typical cross sections for the four-lane and two-lane roadways are shown on Exhibit 2.

B. Description of Alternatives

Eleven alternative alignments and the "No Build" alternative were considered. Six alignments are still being considered as shown on Exhibit 3 and are discussed under "Alternatives Under Consideration". Five of these alignments, shown on Exhibit 4 were rejected by a Project Development Team consisting of representatives of the Federal Highway Administration, City of Lincoln, Placer County and California Department of Transportation and are discussed below under "Alternatives Withdrawn from Consideration". A discussion of the "No Build" Alternative has been provided.

1. Alternatives Under Consideration

Alternative AA Alignment

The AA alignment commences .48 km (0.3 mi) south of the intersection of existing Route 65 and Industrial Boulevard at Post Mile T12.5 (see Exhibit 4). The alignment veers from the existing highway turning northwest, crosses over Industrial Boulevard and the Southern Pacific Transportation Company (SPTC) railroad tracks. The alignment turns north where it intersects Moore Road approximately 609.6 m (2000 ft) west of the Moore Road/Joiner Parkway intersection. The alignment continues in a northerly direction crosses Nicolaus Road approximately 609.6 m (2000 ft) west of the Nicolaus Road/Joiner Parkway intersection; it then passes over the SPTC tracks and existing Route 65 turning in a northwesterly direction rejoining the existing highway 0.40 km (0.3 mi) south of Wise Road at Post Mile 17.0. This alternative has a total length of approximately 8.05 km (5.0 miles).

Stage construction of the facility would include a four-lane divided expressway from its southern terminus to just north of Nicolaus Road. The facility would then be reduced to a two-lane roadway where it would transition back to the existing conventional two lane highway at its northern terminus.

Three highway structures will be required to separate the proposed alignment from existing facilities. Construction of overhead structures will be required to cross Industrial Boulevard and the SPTC tracks south of Lincoln and the SPTC tracks and the existing highway north of Lincoln. A partial interchange is planned at Industrial Boulevard providing a southbound off-ramp and a southbound on-ramp only. A partial cloverleaf interchange also is proposed at the alignment's intersection with Nicolaus Road.

Additional structures will be required at all stream crossings. The AA alignment will cross Ingram Slough, Auburn Ravine, and several branches of Markham Ravine. The type of structures and their spans have yet to be determined. Channelization work would be necessary at most stream crossings.

A Park-n-Ride lot is planned in conjunction with the AA alignment south of the proposed Industrial Boulevard/Southern Pacific Transportation Company's Overhead. The proposed lot will be built in the intervening area between the existing highway and Industrial Boulevard.

Selection of this alternative alignment was based upon several factors. This alignment was laid out to provide the best possible geometrics at Nicolaus Road to provide good capacity, weaving and sight distance and storage between intersections on Nicolaus Road. This alignment was very similar in the type of facility and location to that of the adopted route. It was of short length and did not conflict with planned development at the time of selection. In addition, the alignment generally avoids lands whose acquisition costs would be high given that development will have occurred prior to approval of this project.

Alternative A5 Alignment

The A5 alignment commences .48 km (0.3 mi) south of the intersection of existing Route 65 and Industrial Boulevard at Post Mile 12.5 (see Exhibit 3). The alignment diverges from the existing highway turning northwest, crossing Industrial Boulevard and Southern Pacific Transportation Company's tracks. The alignment turns north where it intersects with Moore Road, approximately 548.6 m (1800 ft) west of the Moore Road/Joiner Parkway intersection. The alignment continues in a northerly direction crossing Nicolaus Road approximately 731.5 m (2400 ft) west of the Nicolaus Road/Joiner Parkway intersection, passes over the SPTC tracks and existing highway turning northwest, rejoining the existing highway 0.48 km (0.3

mile) south of Wise Road at Post Mile 17.0. This alternative has a total length of approximately five miles 8.05 km (5.0 miles).

Stage construction of the facility would include a four-lane divided expressway from its southern terminus to just north of Nicolaus Road. The facility would then be reduced to a two-lane roadway where it would transition back to the existing conventional two-lane highway at its northern terminus.

Three highway structures will be required to separate the proposed alignment from existing facilities. Construction of overhead structures will be required at Industrial Boulevard and the Southern Pacific Transportation Company's tracks on the south. A partial interchange is planned at Industrial Boulevard providing a southbound off-ramp and a southbound on-ramp only. A partial cloverleaf interchange will also be constructed at the alignment intersection with Nicolaus Road. A second overhead structure will be necessary to cross the SPTC tracks and existing highway north of Lincoln.

Additional structures will be required at all stream crossings. The A5 alignment will cross Ingram Slough, Auburn Ravine, and several branches of Markham Ravine. The type of structures and their spans have yet to be determined. Channelization work would be necessary at most stream crossings.

A Park-n-Ride lot is planned in conjunction with the A5 alignment south of the proposed Industrial Boulevard/Southern Pacific Transportation Company Track overhead. The proposed lot will be built in the intervening area between the existing highway and Industrial Boulevard.

This alignment was created to avoid Lincoln Airport/park area and Markham Ravine Estates in the event they would develop before route adoption.

Alternative A5C1 Alignment

The A5C1 alignment begins .48 km (.3 mi.) south of the intersection of existing Route 65 and Industrial Boulevard at Post Mile 12.5 (see Exhibit 3). This alignment diverges from the existing highway approximately 518.2 m (1700 ft) south of Industrial Boulevard turning northwest crossing Industrial Boulevard and the Southern Pacific Transportation Company's tracks. The alignment turns north where it intersects Moore Road, approximately 548.6 m (1800 ft) west of the Moore Road/Joiner Parkway intersection. The alignment continues in a northerly direction crossing Nicolaus Road, approximately 731.5 m (2400 ft) west of the Nicolaus Road/Joiner Parkway intersection; it parallels Lakeside Drive and then swings in a northwesterly direction. The alignment intersects Wise Road, crosses Coon Creek and then turns in a northerly direction bisecting Dowd Road 1,219.2 m (4000 ft) south of its intersection with Dalby Road. The alignment proceeds until it

rejoins the existing highway at a point just south of the Bear River. The total length of this alignment is 18.19 km (11.3 miles).

Staged construction of the facility is planned in which a four-lane divided expressway constructed from its beginning south of Lincoln to just north of Nicolaus Road. The facility would then be reduced to a two-lane expressway for its remaining length until rejoining the existing highway north of Sheridan.

Local road connections in the initial phase would include partial interchanges at Industrial Boulevard and Nicolaus Road and at grade connections with Wise Road and Riosa Road. For the ultimate freeway interchanges would be constructed at Nicolaus Road, Wise Road, and Riosa Road.

Construction of an overhead structure crossing would be required for the Industrial Boulevard and Southern Pacific Transportation Company's tracks south of Lincoln.

Bridges would be constructed at all stream crossings along the alignment. This alignment crosses the following streams: Ingram Slough, Auburn Ravine, Markham Ravine, Coon Creek, several branches of Yankee Slough. The alignment also crosses the Camp Far West Aqueduct near Sheridan.

Park-n-Ride lots are planned in conjunction with this alignment at the following locations: Lot 1 is to be located south of the proposed Industrial Boulevard/SPTC tracks overhead in the area between the existing highway and Industrial Boulevard. Lot 2 would be sited in the vicinity of the proposed Riosa Road interchange.

The A5C1 alignment was developed in recognition of the difficulty and expense required to upgrade existing Route 65 to freeway north of Lincoln and the additional expense and maintenance problems associated with a second railroad crossing.

Alternative AAC2 Alignment

The AAC2 alignment commences .48 km (0.3 mi.) south of the intersection of existing Route 65 and Industrial Boulevard at Post Mile 12.5 (see Exhibit 3). The alignment swings northwest crossing over Industrial Boulevard and the Southern Pacific Transportation Company's tracks. The alignment turns north where it intersects Moore Road, approximately 609.6 m (2000 ft) west of the Moore Road/Joiner Parkway intersection. The alignment continues in a northerly direction crosses Nicolaus Road, approximately 609.6 m (2000 ft) west of the Nicolaus Road/Joiner Parkway intersection. As the alignment approaches the Southern Pacific Transportation Company's tracks at a distance of approximately 0.48 km (0.3 mi) it turns to the northwest intersecting Wise Road. After the alignment crosses over Coon

Creek, it turns back to the north, intersects Dowd Road 304.8 m (1000 ft) south of Dalby Road, and continues until it rejoins existing Highway 65 approximately 2.90 km (1.8 miles) north of Sheridan at Post Mile 23.4.

Staged construction of the facility would include a four-lane divided expressway from its southern terminus to just north of Nicolaus Road. The facility would then be reduced to a two-lane expressway for its remaining length until rejoining the existing highway north of Sheridan.

Connections with local roads for the ultimate freeway would be provided by the construction of interchanges at Nicolaus Road, Wise Road, and Riosa Road. Under staged construction plans, an interchange would be constructed at Nicolaus Road and with at grade intersections at Wise Road and Riosa Road.

Construction of an overhead structure crossing would be required for Industrial Boulevard and SPTC tracks south of Lincoln. A partial interchange is also planned at Industrial Boulevard providing a southbound off-ramp and a southbound on-ramp only.

Bridges would be constructed at all stream crossing along the alignment. This alignment crosses the following streams: Ingram Slough, Auburn Ravine, Markham Ravine, Coon Creek, and several branches of Yankee Slough. the alignment also crosses the Camp Far West Aqueduct near Sheridan.

Park-n-Ride lots are planned in conjunction with this alignment at the following locations: Lot 1 is located south of the proposed Industrial Boulevard/Southern Pacific Transportation Company's track overhead in the area between the existing highway and Industrial boulevard. Lot 2 is located in the vicinity of the proposed Riosa Road Interchange.

The AAC2 alignment was developed in an attempt to avoid areas of extensive vernal pools at the juncture of the A and C alignments.

Alternative D1 Alignment

The D1 alignment starts .48 km (0.3 mi) south of the intersection of existing Route 65 and Industrial Boulevard at Post Mile 12.5 (see Exhibit 3). This alignment leaves the existing highway and proceeds in a northwesterly direction crossing over Industrial Boulevard and the Southern Pacific Transportation Company's tracks. It intersects Moore Road and Nelson Lane before turning northward crossing Nicolaus Road passing the Lincoln Airport to the west. The alignment continues due north a distance of 5.64 km (3.5 miles) before swinging northwest crossing Dowd Road approximately 91.4 m (300 ft) north of its intersection with Dalby Road. The alignment proceeds in a northwest direction crosses Riosa Road and

rejoins the existing highway approximately 0.16 km (0.1 mile) from the Bear River at Post Mile 23.8. The total length of this alignment is 19.0 km (11.8 miles).

The proposed ultimate facility for this alignment is a controlled access four-lane freeway. Interchanges would be constructed at Nelson Lane, Wise Road and Riosa Road. Under staged construction, however, a four-lane divided expressway would be constructed to Nicolaus Road and two-lane expressway north of Nicolaus Road.

Local road connections will be provided in the initial stage by construction of an interchange at Nelson Lane and at grade connections at Wise Road and Riosa Road.

Additional structures required including the construction of an overhead would be necessary at Industrial Boulevard and the SPTC tracks and a partial interchange at Industrial Boulevard providing a southbound off-ramp and a southbound on-ramp only. Underpasses would also be needed at Nicolaus Road and Dowd Road. Dalby Road would be realigned to allow construction of the Dowd Road underpass.

Bridges would be constructed at all stream crossings along the alignment. The type and length of these structures have yet to be determined. This alignment crosses the following streams: Ingram Slough, Auburn Ravine, Markham Ravine, Coon Creek, several branches of Yankee Slough. This alignment also crosses the Camp Far West Aqueduct.

Park-n-Ride lots are planned in conjunction with this alignment at Industrial Boulevard and Riosa Road.

The D1 alignment was developed in response to the Corps of Engineers recommendation that alignments be developed that completely avoided wetlands impacts or if this was not possible, to develop alternatives which had the fewest possible wetland impacts.

Alternative D13 Alignment

The D13 alignment commences 0.3 mi. (.48 km) south of the intersection of existing Route 65 and Industrial Boulevard at Post Mile 12.5 (see Exhibit 3). This alignment deviates from the existing highway just south of its intersection with Industrial Boulevard. It then crosses over Industrial Boulevard and the Southern Pacific Transportation Company's tracks and proceeding in a westerly direction. The alignment intersects Moore Road and Nelson Lane before turning to the north crossing Nicolaus Road and passing the Lincoln Airport to the west. The alignment continues in a northerly direction a distance of 5.64 km (3.5 miles) then swings northwest and crosses Dowd Road approximately 91.4 m (300 ft) north of intersection

with Dalby Road. It continues in a northwest direction, intersects Riosa Road, and rejoins the existing highway 0.1 mile from the Bear River at Post Mile 23.8. The total length of this alignment is 20.60 km (12.8 miles).

The proposed ultimate facility to be constructed on this alignment is a controlled access four-lane freeway. Interchanges would be constructed at Nelson Lane, Wise Road and Riosa Road. An overhead would be built over Industrial/SPTC railroad tracks and underpasses constructed at Nicolaus Road and Dowd Road. A partial interchange is also planned at Industrial Boulevard providing a southbound off-ramp and a southbound on-ramp only.

Under staged construction, however, a four-lane divided expressway would be constructed from the project's southern terminus to Nicolaus Road and a two-lane expressway north of Nicolaus Road. Local road connections in the initial stage would be provided by construction of an interchange at Nelson Lane and at grade intersections at Wise Road and Riosa Road.

Bridges would be constructed at all stream crossings along the alignment. The type and length of span(s) of these structures have yet to be determined. This alignment crosses the following streams: Ingram Slough, Auburn Ravine, Markham Ravine, Coon Creek, and several branches of Yankee Slough. This alignment also crosses the Camp Far West Aqueduct.

The D13 alignment was developed in response to public reaction to the D1 alignment impacts to residences on Rockwell Lane and in an effort to further reduce wetland impacts at the south end of the bypass. Based on information available to date, the D13 alignment is the preferred alternative for the bypass since it has the least overall impact to sensitive biological resources, areas of proposed land development and existing residences. It is also the most cost effective for the bypass in terms of dollar cost per mile of new roadway.

2. Estimated Cost of Bypass Alternatives

C. Estimated cost of Bypass Alternatives

Alternative AA

| <u>Estimated Item</u> | <u>Four/Two-lane Cost</u> | <u>Four-lane Cost</u> |
|-----------------------|---------------------------|-----------------------|
| Roadway Items | \$28,605,000.00 | \$30,988,000.00 |
| Structure Items | \$ 6,773,000.00 | \$ 6,773,000.00 |
| Subtotal Construction | \$35,378,000.00 | \$37,761,000.00 |
| Right of Way | \$10,900,000.00 | \$10,900,000.00 |
| Total Project Cost | \$46,278,000.00 | \$48,661,000.00 |

Alternative A5

| <u>Estimated Item</u> | <u>Four/Two-lane Cost</u> | <u>Four-lane Cost</u> |
|-----------------------|---------------------------|-----------------------|
| Roadway Items | \$28,239,000.00 | \$31,416,000.00 |
| Structure Items | \$ 6,773,000.00 | \$ 6,773,000.00 |
| Subtotal Construction | \$35,012,000.00 | \$38,189,000.00 |
| Right of Way | \$11,108,000.00 | \$11,108,000.00 |
| Total Project Cost | \$46,120,000.00 | \$49,297,000.00 |

Alternative A5/C1

| <u>Estimated Items</u> | <u>Four/Two-lane Cost</u> | <u>Four-lane Cost</u> |
|------------------------|---------------------------|-----------------------|
| Roadway Items | \$42,370,000.00 | \$54,236,000.00 |
| Structure Items | \$ 7,865,000.00 | \$ 7,865,000.00 |
| Subtotal Construction | \$50,235,000.00 | \$62,101,000.00 |
| Right of Way | \$11,247,000.00 | \$11,247,000.00 |
| Total Project Cost | \$61,482,000.00 | \$73,348,000.00 |

Alternative AA/C2

| <u>Estimated Items</u> | <u>Four/Two-lane Cost</u> | <u>Four-lane Cost</u> |
|------------------------|---------------------------|-----------------------|
| Roadway Items | \$46,185,000.00 | \$54,236,000.00 |
| Structure Items | \$ 7,865,000.00 | \$ 7,865,000.00 |
| Subtotal Construction | \$54,050,000.00 | \$62,101,000.00 |
| Right of Way | \$12,807,000.00 | \$12,757,000.00 |
| Total Project Cost | \$66,857,000.00 | \$74,858,000.00 |

Alternative D1

| <u>Estimated Items</u> | <u>Four/Two-lane Const</u> | <u>Four-lane Cost</u> |
|------------------------|----------------------------|-----------------------|
| Roadway Items | \$43,270,000.00 | \$49,378,000.00 |
| Structure Items | \$ 7,865,000.00 | \$ 7,865,000.00 |
| Subtotal Construction | \$51,072,000.00 | \$57,243,000.00 |
| Right of Way | \$10,000,000.00 | \$10,000,000.00 |
| Total Project Cost | \$61,072,000.00 | \$67,243,000.00 |

Alternative D13

| <u>Estimated Items</u> | <u>Four/Two-lane Cost</u> | <u>Four-lane Cost</u> |
|------------------------|---------------------------|-----------------------|
| Roadway Items | \$37,247,000.00 | \$53,290,000.00 |
| Structure Items | \$ 7,865,000.00 | \$ 7,865,000.00 |
| Subtotal Construction | \$45,112,000.00 | \$61,155,000.00 |
| Right of Way | \$ 9,567,000.00 | \$ 9,567,000.00 |
| Total Project Cost | \$54,679,000.00 | \$70,722,000.00 |

3. No Build Alternative

The "no build" alternative would have a negative impact on Lincoln's economic future and on interregional traffic circulation. Traffic conditions would deteriorate to the point where Lincoln's economic position would be jeopardized due to uncertain movement of goods and services on Highway 65. Goods and services moving along the Highway 65 corridor between the Roseville/Interstate 80 area, the Marysville/Highway 20 area and Chico would also be impeded. Emergency and public services would be hampered as well.

As traffic increases, noise and air pollution levels would also rise in the vicinity of Lincoln. Therefore, the "no-build" does not address the basic problems of this project. Congestion will increase as the area and region develops. The accident rate can be expected to rise as congestion increases. Regional trips will be increasingly delayed as the level of service falls.

4. Alternatives Withdrawn From Consideration

Alternative alignments A3, A4, D2, E, and T (See Exhibit 4) were considered and deemed not feasible for further consideration for the following reasons:

Alternative A3 and A4 Alignments

The A3 and A4 alignments coincide with the A5 alignment at the south end of the bypass. At Auburn Ravine they turn northwest, running parallel to the section line. North of Nicolaus Road, the A3 and A4 continue on the west side of the section line. These alignments cross over the railroad tracks and the existing highway, then turn in a northwesterly direction and conform to existing Route 65. These alternatives were developed based on the assumption that the area west of the section line was less sensitive biologically than east of the section line. Current studies indicate that the remaining A alignments have approximately the same impact upon biological resources. In addition, recent approval of subdivision plans in this area makes the cost of acquiring the right of way unreasonably high compared to other A alignments east of the section line.

Alternative D2 Alignment

The D2 alignment was developed in an attempt to reduce the impacts on wetlands and residents in the southern portion of the project. This alignment begins about 1.3 miles south of the D1 line. The D2 is roughly parallel to the D1 line upon leaving the existing highway to near Nicolaus Road. North of Nicolaus Road the D2 line coincides with the D1 alignment. The D2 alignment would require the removal of four to seven residential dwellings and possible soundwalls for approximately five dwellings. The D2 line has a greater impact on dwellings and vernal pools than the D1 line, based on a preliminary biological survey. Due to the alignment's longer length, remoteness from Lincoln and greater potential impacts upon wetlands than the D1 alignment it was dropped from further consideration.

Alternative E Alignment

The alternative E alignment begins south of Industrial Boulevard and turns in a northeasterly direction around the east side of Lincoln and proceeds through vacant land until it crosses State Route 193. After crossing Route 193, the alignment proceeds northerly and crosses Auburn Ravine. North of Auburn Ravine, the alignment crosses Virginiatown Road, McCourtney Road and Gladding Road before rejoining existing Route 65 just south of its intersection with Wise Road.

This alignment was developed as an alternative to the A alignments. The E alignment distance is approximately 2.6 miles out of direction as compared to the existing facility or the A line. The traffic analysis performed for the

Stage II Project Work Program indicated that a major portion of through traffic on Route 65 would exit the expressway and proceed through Lincoln to save time and distance of travel. This alignment, therefore, does not satisfy the requirements of this project and based on recent annexations to the City of Lincoln, extends through an area with approved residential and commercial development.

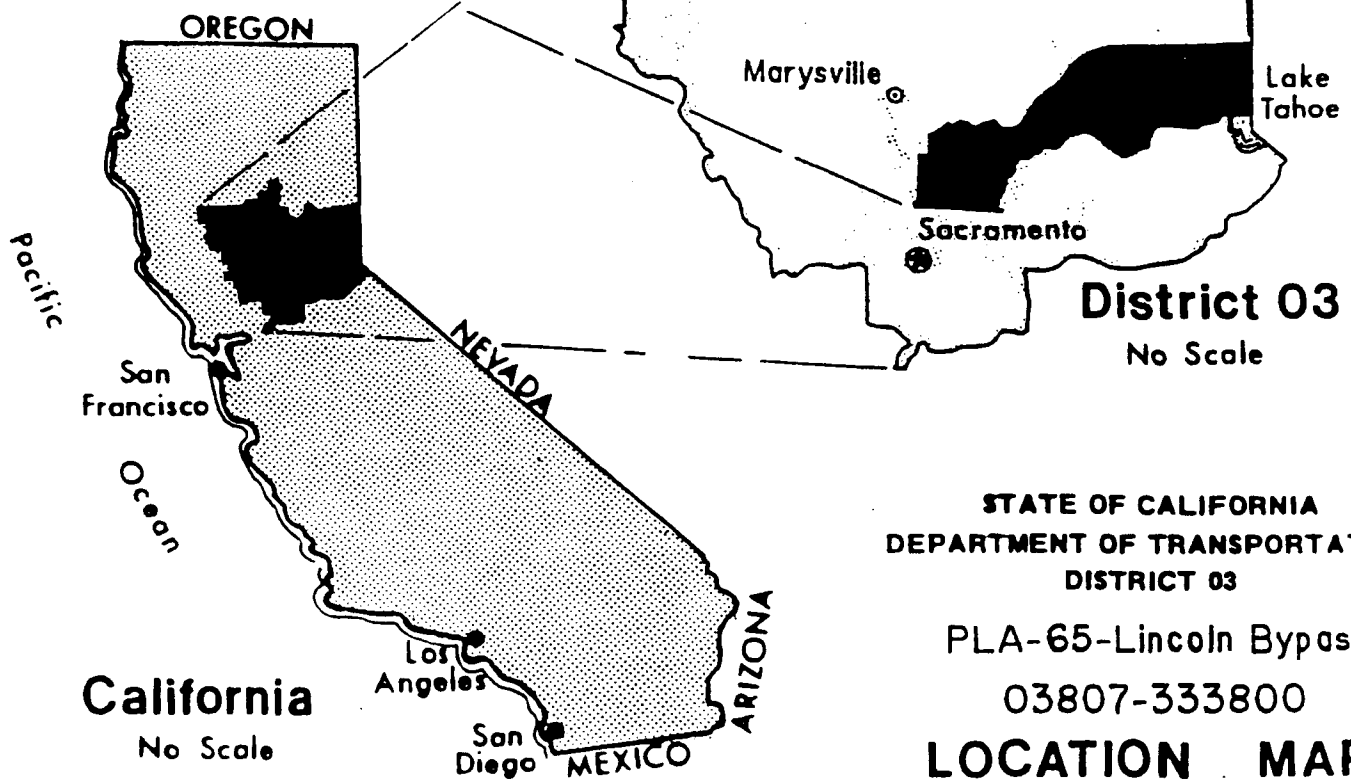
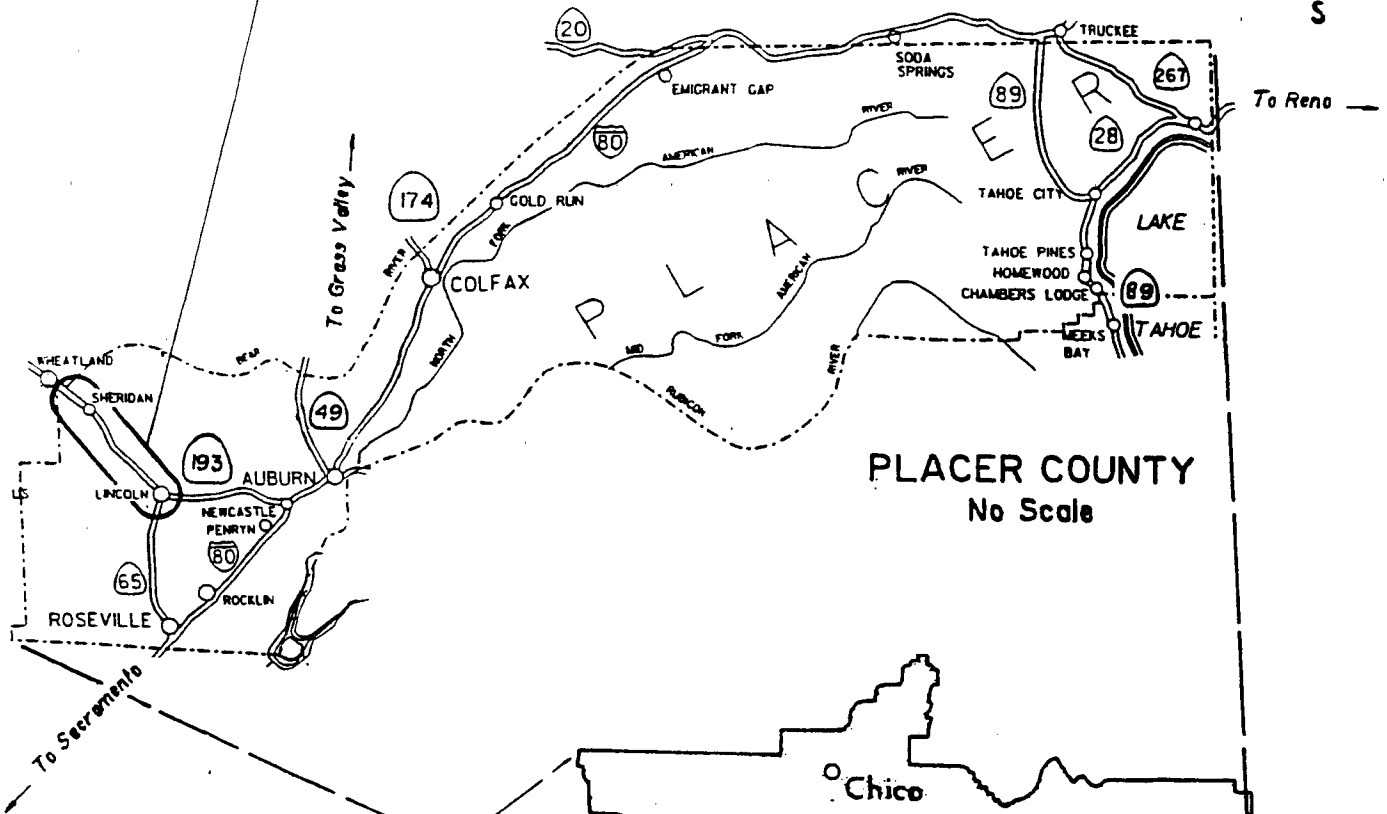
Alternative T Alternative

Alternative T upgrades the existing highway to four lanes. From Industrial Boulevard to Auburn Ravine and from Gladding Road to near Wise Road, a four-lane expressway with 14.0 m (46 ft) median would be constructed. From Auburn Ravine to Gladding Road, the facility would narrow to four lanes plus a continuous left-turn lane. The proposed upgrades through downtown Lincoln can be accomplished by eliminating on-street parking and narrowing the sidewalks from 3.7 m (12 ft) to 2.4 m (8 ft).

The primary disadvantage of this alternative is that it fails to satisfy the regional need for an adequate freeway system in the area. It does not alleviate the problem of numerous cross streets and driveways. As Lincoln grows, traffic through the Central Business District will become more congested and delays and accident rates will likely increase. In addition, widening to four lanes through the downtown area does not leave the option for future widening. The 10 year (2010) and 20 year (2020) levels of service are projected to be E and F respectively. After the 20-year design period the only viable option to enhance the level of service and capacity would be to construct a bypass.

PROJECT LOCATION

EXHIBIT 1



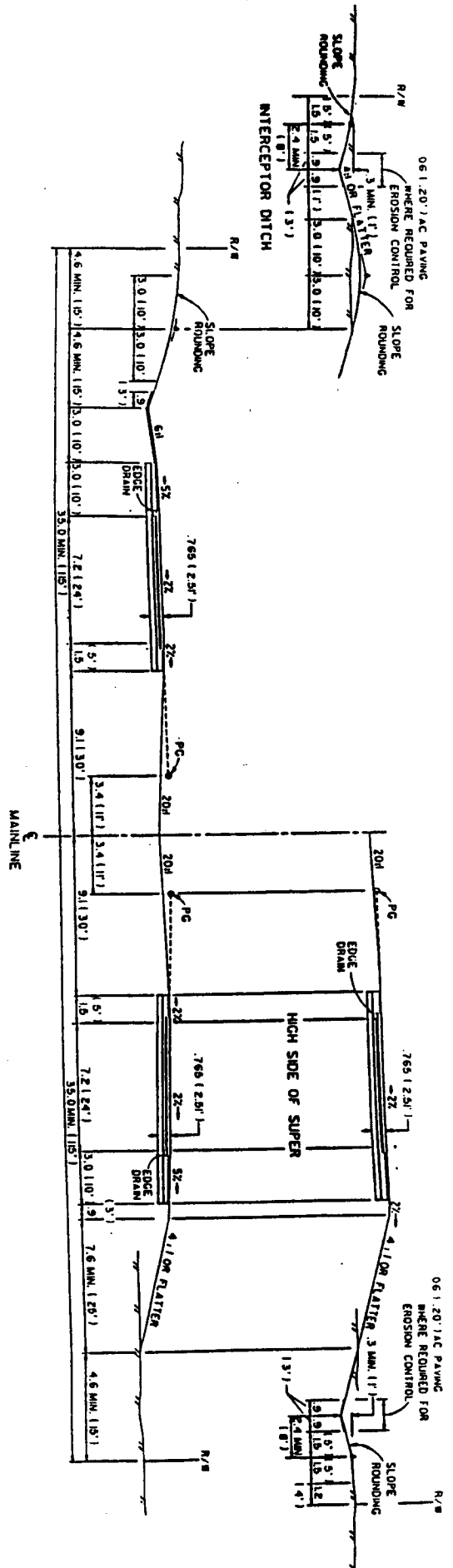
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DISTRICT 03

PLA-65-Lincoln Bypass

03807-333800

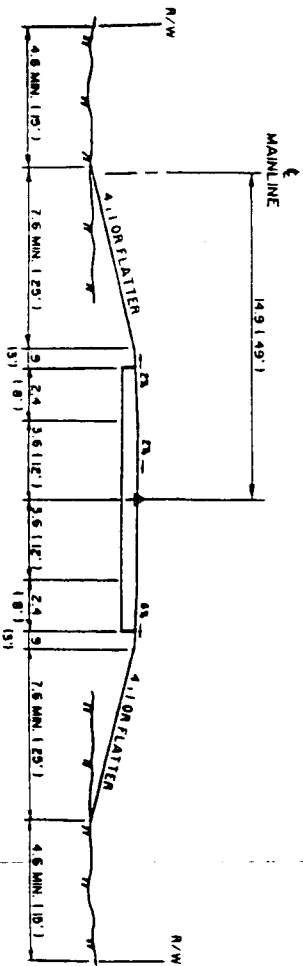
LOCATION MAP

October 1993



4 - LANE SECTION

NOTE:
All dimensions are in Meters unless shown otherwise.



2 - LANE SECTION

TYPICAL CROSS SECTIONS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL BRANCH
DISTRICT 3
PLA-65-Lincoln Bypass

03807-333800

SCALE 1:400 (1"=30') DATE January 1994

03-PLA-65
Lincoln Bypass
P.M. R12.2/R23.8
E.A. 333800

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS

Environmental technical studies for the project are currently underway; however, only the results of the biological and cultural resources investigations are available at this time.

An estimate of the sensitive biological resources within each alignment for the project is provided in Attachment A.

Preliminary evaluations of potential impacts wetlands, historic architectural and archaeological resources have been preformed and are discussed below:

1. Wetlands

The initial delineation identifying the wetlands within the project study area was verified by the Army Corps of Engineers in September of 1991. Recertification of the delineations performed by Beak Consultants will be submitted in September of 1994.

A preliminary wetlands impact assessment has been performed. The impacts were assessed in two ways, the first calculates the number of occurrences of each wetland type that is within the proposed right of way for each alternative alignment. The second procedure for calculating the impacts is by estimating the acreage of wetland that will be filled per alignment (See Attachment B). The acres of fill estimates only the areas where fill will be directly placed and does not account for indirect impacts (See Attachment C).

The A5C1 and AAC2 alignments have the greatest occurrences of vernal pools and swales within their proposed right of way. Likewise these alignments will have the greatest amount of fill placed in pools and swales. Although the D1 and D13 alignments are much longer than either the AA or A5 alignments the D alignments will impact fewer vernal pools and swales. The estimate of vernal pools and wales for the D alignments is between 155-163, while the AA is 175 and the A5 is 217.

The D13 and D1 alignments have the greatest estimate of fill in freshwater marsh primarily because of impacts to Markham Ravine.

The A5C1 has the greatest estimated total acre of fill to be placed in wetlands with 20.8 acres. Approximately half (10.3) of the fill will be in vernal pools and swales.

The D1 alignment has the second highest acreage of fill in wetlands with 20.3 and the D13 has the third highest fill with 18.3 acres of impact. Unlike A5C1, the majority of fill will be in freshwater marsh, the D1 estimated at 10.6 acres of fill and the D13 with 12.4. Impacts to vernal pools and swales are estimated to be 4.4 acres for the D1 and 3.4 acres of fill for the D13 alignment.

2. Cultural Resources

An historic architectural survey was performed and several properties were identified which appeared eligible for inclusion on the National Register of Historic Places. None of these properties are located within alignments under consideration.

An archaeological surveys was performed and 15 sites were recorded. Of these properties only two are believed to be eligible for inclusion on the National Register of Historic Places. These properties are located on the AAC2 alignment and would be impacted.

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| | |
|-------------------|---------------------|
| To Henry Bass | From Lurie Adams |
| Co. 03-Environ Br | Co. Envir. Division |
| Dept. | Phone # 8-435-3415 |
| Fax # 8-457-4457 | Fax # |

ATTACHMENT A

RESOURCES WITHIN EACH ALIGNMENT FOR THE LINCOLN BYPASS

| FAIRY SERIES (#VPS) | TREES VALLEY OAK-Q1 BLUE OAK-Qd | VERNAL MARSHES (M) | CREEKS (X) | FRESHWATER MARSHES ACRES | OPEN WATER | ESTIMATED WETLAND TOTALS |
|---------------------------|---|-------------------------------------|----------------|--------------------------------|---------------|--------------------------------|
| 15 POOLS (P) | 112 Q1=11 Qd=90 | 9 MARSHES (M) 2.0 ACRES | 5 XINGS (X) | 5 MARSHES 2.0 ACRES | 0 | 9ACRES |
| 13P | 190 Q1=57 Qd=120 | 11M 2.0 ACRES | 5X | 3M 1.5 ACRES | 0 | 9ACRES |
| 17P | 224 Q1=118 Qd=90 | 12M 2.5 ACRES | 8X | 13M 4.5 ACRES | 0 | 21ACRES |
| 16P | 211 Q1=75 Qd=120 | 9M 3.0 ACRES | 8X | 7M 2.5 ACRES | 0 | 15ACRES |
| 28P | 169 Q1=133 Qd=2 | 9M 3.0 ACRES | 7X | 13M 11 ACRES | 1 | 20.5 ACRES |
| 19P | 216 Q1=199 Qd=2 | 6M 2.0 ACRES | 5X | 11M 12.5 ACRES | 1 | 18.5 ACRES |

1 1993)

ESTIMATED NUMBER OF VERNAL POOLS/SWALES, RIPARIAN AND MARSHES IN
THE PROPOSED ALIGNMENTS

| ALIGNMENT | VERNAL POOLS AND SWALES | VERNAL MARSHES | FRESH WATER MARSHES | RIPARIAN X-INGS |
|-----------|----------------------------------|-------------------|---------------------------|--------------------|
| AA | 175 | 11 | 3 | 5 |
| A5 | 217 | 9 | 5 | 6 |
| AAC2 | 257 | 9 | 7 | 8 |
| A5C1 | 246 | 12 | 13 | 8 |
| D1 | 163 | 9 | 13 | 7 |
| D13 | 155 | 6 | 11 | 5 |

ESTIMATED ACRES OF FILL IN WETLANDS IN PROJECT ALIGNMENTS

| ALIGNMENT | VERNAL POOL | VERNAL SWALE | VERNAL MARSH | FRESHWATER MARSH | RIPARIAN | WILLOW SCRUB | TOTAL |
|-----------|----------------|-----------------|-----------------|---------------------|----------|-----------------|-------|
| AA | 3.98 | 1.38 | 1.87 | 1.41 | 0 | 0 | 8.64 |
| A5 | 3.46 | 0.87 | 1.71 | 1.91 | 1.13 | 0 | 9.08 |
| AAC2 | 7.66 | 2.07 | 2.89 | 2.44 | 0 | 0 | 15.06 |
| A5C1 | 10.26 | 2.41 | 2.24 | 4.43 | 1.48 | 0 | 20.82 |
| D1 | 4.37 | 0.92 | 2.86 | 10.61 | 1.48 | 0.08 | 20.32 |
| D13 | 3.39 | 0.83 | 1.72 | 12.35 | 0 | 0 | 18.29 |